for RT intervention and US$ 17.88/DALY for RPR intervention. Cost-effectiveness ratios (CERs) were more sensitive to the prevalence rate, sensitivity of tests, and DALY discount rate. **CONCLUSIONS:** Using the on-site antenatal rapid testing, same day treatment for positive results, and confirmed by RPR testing approach is cost-effective in Mongolia.

PIH32
COST EFFECTIVENESS OF CALCIUM SUPPLEMENT IN REDUCING PREECLAMPSIA-RELATED MATERNAL MORTALITY
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OBJECTIVES: To estimate the cost-effectiveness of the supply of calcium of 1200mg per day from the week 14 of pregnancy to all pregnant women compared to not supplying it to reduce the incidence of preeclampsia. **METHODS:** A decision tree was built in TreeAge® with outcome measured in life years gained (LYG) associated to the reduction in maternal deaths. The costs were included from the perspective of the Health System in Colombia. Pharmaceutical costs were obtained from 2008 SISMED (1) and the value of the procedures was calculated by adjusting the values of Tariff Manual ISS 2001 + 30% (2), these values were compared with information of costs supplied by three EPS. All costs are expressed in Colombian pesos of 2010. The discount rate was 0%. It was performed sensitivity univariate and probabilistic analyzes for costs and effectiveness. **RESULTS:** Compared to no intervention, calcium supplement is a dominant alternative. If the incidence of preeclampsia is lower than 51.7 per 1000 pregnant women or the cost per tablet of calcium of 600 mg is greater than $454, calcium supplement is no longer a cost-effective alternative in Colombia for a threshold of 3 times the GDP per capita in Colombia of 2010 by LYG, equal to $36,143,550. **CONCLUSIONS:** Supply of calcium to all pregnant women from week 14 of gestation is a dominant alternative compared to no intervention, which saves 200 LYG, while it decreases costs in the order of $5,304 million pesos per 100.000 pregnant women.

PIH33
ECONOMIC EVALUATION OF ULIPRISTAL ACETATE FOR THE TREATMENT OF PATIENTS WITH MODERATE AND SEVERE SYMPTOMS OF UTERINE FIBROIDS IN ROMANIA
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OBJECTIVES: Ulipristal acetate is a selective progesterone receptor modulator that has been demonstrated to be an effective 3-month pre-operative treatment for moderate to severe symptoms of uterine fibroids in adult women of reproductive age. The aim of this analysis was to assess the cost-effectiveness of 5 mg ulipristal acetate as an add-on therapy to standard pre-surgical observation and treatment or immediate hysterectomy in Romania. **METHODS:** A Markov model was developed using a 10-year time horizon. Ulipristal acetate was compared with pre-surgical observation and immediate hysterectomy. The model comprised the following mutually exclusive health states: mild, moderate, severe, or persistent severe excessive bleeding disorder; myomectomy; post-myomectomy with mildly to moderately excessive bleeding disorder; post-myomectomy with severely excessive bleeding disorder; hysterectomy; post-hysterectomy; post-menopause; and death. Transition probabilities and utility values were obtained from clinical trials and the scientific literature. Resource utilisation and unit costs were derived from the consensus panel of clinical experts and the Romanian National Insurance House tariffs. Cost vectors in RON were converted to EUR by using 2013 Romanian National Bank average exchange rate (1 EUR = 4.419 RON). **RESULTS:** Adding a 3-month course of ulipristal acetate to pre-operative observation was predicted to achieve an additional 0.021 quality-adjusted life years (QALYs) at an estimated incremental cost of 367 €, which would result in an incremental cost of 17,749 €/QALY. When 3 months of ulipristal acetate therapy was compared with immediate hysterectomy, the incremental cost-effectiveness ratio was reduced to 2,300 €/QALY. The results were most sensitive to the utility value of the post-hysterectomy health state but responsive to changes in other model parameters. **CONCLUSIONS:** The results of this analysis suggest that adding ulipristal acetate treatment to standard pre-surgical therapy represents a good value for money in Romania. The inclusion of societal benefits may considerably reduce the cost-effectiveness ratio.

PIH34
THE COST-EFFECTIVENESS OF EMERGENCY HORMONAL CONTRACEPTION WITH ULIPRISTAL ACETATE VERSUS LEVONORGESTREL FOR MINORS IN FRANCE
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OBJECTIVES: To compare the cost and effectiveness of two emergency contraceptive methods in minors in France and to support the payer's analysis if it is worth to deliver ulipristal acetate for free to minors. **METHODS:** Based on a decision-analytical model, the cost-effectiveness of two emergency contraceptive methods is compared. Pregnancy rates, outcome of unintended pregnancy in minors and resource utilization are derived from literature. Resources and their costs are considered until termination or a few days after delivery. Costs are taken from a collective perspective. Sensitivity analyses are performed on the most sensitive input parameters. **RESULTS:** Using emergency contraception is superior to no method. The cost of an unintended pregnancy in a French minor is estimated to be 1630€ (1330€ - 1803€). Almost 4 million€ (3.1-13.7million€) could have been saved by using ulipristal acetate instead of levonorgestrel in 2010. The incremental cost of avoiding an additional unintended pregnancy with ulipristal acetate as compared to levonorgestrel is estimated to be 418€. Ulipristal acetate is most cost-effective in the subgroup of intake within 24 hours, where it is more efficacious at a lower cost compared to levonorgestrel. **CONCLUSIONS:** Ulipristal acetate is a cost-effective alternative to levonorgestrel, given that the cost of avoiding an additional pregnancy with ulipristal acetate is less than the average cost of said pregnancies. Therefore, French minors should have free access to ulipristal acetate directly in a pharmacy. Ulipristal acetate should be used rapidly after unprotected intercourse (within 24hours) to benefit from its cost-saving potential compared to levonorgestrel use.

PIH35
CERVICAL ASSESSMENT WITH PROGESTERONE IN THE PREVENTION OF PRETERM BIRTH: A STRATEGY BASED ON COST-EFFECTIVENESS
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INTRODUCTION: Preterm birth (PTB) complications are estimated to be the second most common cause of death in under-five children and responsible for 3.1million neonatal deaths. According to a worldwide analysis, Brazil is one of the top ten countries with the highest number of PTB. Considering its long-term costs, strategies that reduce incidence may be cost-effective. Treatment with progesterone is one of the interventions recommended for PTB prevention due to the evidence supporting its efficacy in women with short cervix and prior history of preterm delivery. **OBJECTIVES:** Determine whether treatment with progesterone for pregnant women with a short cervical length <25mm identified in routine measurement of second-trimester transvaginal cervical length by ultrasound in low-risk singleton pregnancies is a cost-effective strategy under the Brazilian Healthcare System perspective. **METHODS:** A cohort model was developed according to the disease and resources use. Epidemiology of pregnancies at risk of PTB eligible for progesterone treatment were obtained from published data. To obtain national clinical data, births were categorized by gestational week age at delivery specialist opinion. Progesterone effectiveness data were obtained from systematic reviews, meta-analysis and specialist opinion. Costs included screening test, prenatal consultation, progesterone and neonatal hospitalization. Exchange rate was 1USD=2.30BRL. Results were presented in cost/PTB avoided. **RESULTS:** Considering 278.100 PTB, the inclusion of screening test to identify pregnant women with short cervix and its prophylaxis with progesterone shows significant economic savings of USD74 million. Although the expenditure on drug, screening test and prenatal consultation increment the total costs, the reduced number of PTB (263,052 vs 278.100) and neonatal UTI hospitalization length (4,098,543 days vs 4,518,056 days) resulted in a total economic saving. **CONCLUSIONS:** Prevention of PTB is dominant in women with short cervix as compared to a no-prophylactic strategy scenario resulting in economic savings to the Brazilian health care system.

PIH36
COST-EFFECTIVENESS OF PALIVIZUMAB USE IN HIGH RISK CHILDREN FROM BRAZILIAN HEALTH SYSTEM PERSPECTIVE
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OBJECTIVES: This study aimed to investigate the cost-effectiveness of palivizumab to different combinations of risk groups, such as premature children born with gestational age (GA) ≤ 28 weeks, GA ≤ 32 weeks, children with congenital heart disease and bronchopulmonary dysplasia. **METHODS:** Literature review was performed to search effectiveness data. One Markov model (base case), and one decision tree (alternative scenario) were built with a cohort simulation along a 18 years-time horizon for the base case and a 1 year time horizon for the decision tree. Base case consider sequelae after infection, and alternative scenario not. The Health System perspective was used, with a discount rate of 5%. A probabilistic sensitivity analysis (Monte Carlo simulation) with probability distributions fitted to the variables, was performed under the different structural assumptions, as well as a deterministic analysis, using Tornado diagram, to verify the variable modifications able to alter the responses of the model. A threshold analysis was used to estimate the price that palivizumab would fit under an acceptability threshold proposed for the health system. **RESULTS:** The option of using the prophylaxis just in preterm children born with GA ≤ 32 weeks dominated all others. The incremental effectiveness of base case analysis compared with no prophylaxis (base line) was 0.19 QALY. However, this strategy was not cost-effective, presenting an incremental cost-effectiveness ratio (ICER) of R$ 81,627.31/QALY, value above of World Health Organization (WHO) proposed threshold of three times GDP per capita (R$ 63,756.00/QALY). The ICER of GA ≤ 32 weeks in alternative scenario was 2.023.045,72, showing the importance of considering sequelae in analysis. Sensitivity analysis showed that some variables when altered were able to change model final answers. **CONCLUSIONS:** Threshold analyses demonstrated that palivizumab price must be reduced in at least 22% to be incorporated to all populations use, based on WHO threshold.

PIH37
COST-EFFECTIVENESS ANALYSIS OF THE NEW BIOMARKERS FOR DIAGNOSIS OF ACUTE KIDNEY INJURY IN CHILDREN AFTER CARDIAC SURGERY
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OBJECTIVES: Children undergoing cardiac surgery for congenital heart disease are more likely to experience development of acute kidney injury (AKI) in the immediate postoperative period. In current clinical practice, AKI diagnosis is based on a rise in serum creatinine (sCr) levels, which occurs 2-3 days after the initiating renal insult. Many new biomarkers offer promise for earlier AKI diagnosis. The objective

was to assess the incremental cost effectiveness of using serum CysC (sCysC), urine NGAL (uNGAL) and urine L-FABP (uL-FABP) for the diagnosis of AKI in children after cardiac surgery compared with current diagnostic method (monitoring of sCr level). **METHODS:** We developed a decision analytical model to estimate quality-adjusted life years (QALY), lifetime costs and incremental cost-effectiveness of different biomarker-based diagnostic strategies which can be used in clinical practice compared to current strategy. This model simulates detection of AKI, its progression to chronic kidney disease (CKD) and CKD treatment in cohort of patients younger than 18 years. **RESULTS:** The cost-effectiveness ratios were between $1485/QALY for sCr and $3579/QALY for uNGAL. uNGAL and sCys C strategies yielded higher costs and lower effectiveness (ie. dominated) compared to uL-FABP strategy. uL-FABP added 1.43 QALY compared to current diagnostic method at an additional cost of $8521.87. ICER for uL-FABP compared to sCr was $5959.35/QALY. Probabilistic sensitivity analyses indicated that the uL-FABP strategy was cost-effective for all 10.000 patient simulations at specified $50000/QALY threshold. **CONCLUSIONS:** Our results suggest that the use of uL-FABP is likely to represent an economically advantageous strategy for early AKI diagnosis in children after cardiac surgery. However, we need rapid screening uL-FABP test to ensure timely and efficient AKI treatment.

PIH38

COST-EFFECTIVENESS ANALYSIS OF THE THERAPY OF ENDOMETRIOSIS

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OBJECTIVES: Endometriosis is a disease with social and economic impact. We analyses the clinical and pharmaco-economical efficacy of the treatment of genital endometriosis. **METHODS:** This open-label prospective comparative research was performed in 2012-2013 on Center of Endometriosis of Astana. Results of treatment taken from 180 female patients with endometriosis aged 19-35 years old were included into the study. All of them were divided on three groups depending on the methods of therapy. 1st group have a endo-surgery treatment (60 patient), 2nd group (60 patient) - only hormonal therapy (Dienogest 2 mg per day for 6 months) and 3rd group - combined therapy (after endo-surgery taken the Dienogest 2 mg per day for 6 months). For the calculation of cost/effectiveness index we included all of the direct medical expenses. **RESULTS:** In the first group efficacy index is 66,7%, in the second group – 70,0% and in the third group – 91,7%. Index cost/effectiveness for endo-surgery is 143 298 KT (1$=182KT), cost/effectiveness for hormonal therapy is 92 428 KT and cost/effectiveness for combined methods is 115 718 KT. Surgical treatment has the low efficiency of the high costs compared with other therapies. The indicator of cost/effectiveness of the combined therapy is higher than in the hormonal treatment: higher efficiency cost in additional costs. For the objectification of this fact calculated Incremental Index per patient: 186 500 - 107 833 / 92.0 - 70.0 = 182 KT. So, the increase of one percent of effectiveness combined therapy compare to hormonal therapy reflects additional cost, not more than 182 KT per patient. **CONCLUSIONS:** Hormonal therapy resulted as the cost-saving therapy of genital endometriosis in young women. The higher efficiency of treatment of endometriosis are needed additional expenses.

PIH39

COST-UTILITY ANALYSIS OF PREVENTIVE HOME VISITS IN OLDER ADULTS

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OBJECTIVES: Most elderly prefer to grow old in the community within a familiar environment, instead of moving to a nursing home. Preventive home visits based on multidimensional geriatric assessment can be one strategy to support this preference and might additionally reduce health care costs, due to the avoidance of costly nursing home admissions. The purpose of this study was to analyse the cost-effectiveness of preventive home visits from a societal perspective in Germany. **METHODS:** This study is part of a multi-centre, non-blinded, randomised controlled trial. Participants were older than 80 years and living at home. Three home visits were conducted to identify self-care deficits and risk factors, to present recommendations and to implement solutions. The control group received usual care. A cost-utility analysis using QALY based on the EQ-5D was performed. A cost-effectiveness acceptability curve controlled for confounding variables was constructed. A sensitivity analysis to control for the influence of the mode of QALY calculation was performed. **RESULTS:** 278 individuals were included in the analysis. Mean total cost (+874 EUR) and number of QALY (+0.0014) were higher in the usual care group, but differences were not significant. The probability for cost-effectiveness of preventive home visits increased from 6% (Willingness-to-pay: 0 € / QALY) 30% (Willingness-to-pay: 250.000 € / QALY). The results were robust to the mode of QALY calculation. The probability of cost-effectiveness did not exceed 30%. **CONCLUSIONS:** We found convincing evidence that the evaluated preventive home visits programme is not cost-effective.

PIH40

EVALUATION OF THE ECONOMIC BURDEN OF MENOPAUSAL WOMEN IN THE U. S. MEDICAID PROGRAM

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OBJECTIVES: To evaluate the economic burden of menopausal women enrolled in the U.S. Medicaid program. **METHODS:** Menopausal women (International Classification of Disease, 9thRevision, Clinical Modification [ICD-9-CM] diagnosis code 627) were identified using U.S. Medicaid data from 01JAN2008 through 31DEC2010. The initial diagnosis date was designated as the index date. A separate group of patients without a menopause diagnosis but of the same age, race, and gender was identified, matched and designated as the comparison group. A random index date was chosen to minimize selection bias. Patients in both groups were required to be at least age 18 years, with continuous medical and pharmacy benefits 1 year before, and 1 year after the index date. One-to-one propensity score matching (PSM) was used to compare health care costs and utilizations during the follow-up period between the menopausal and the comparison groups, and were adjusted for baseline demographic and clinical characteristics. **RESULTS:** After risk adjustment by PSM, a total of 67,740 patients in each cohort were matched. More menopausal patients had inpatient admissions (15.18% vs. 11.89%, p<0.0001) and other service (99.98% vs. 90.29%, p<0.0001) and pharmacy visits (86.55% vs. 71.23%, p<0.0001) compared to those without menopause. Menopausal patients also incurred significantly higher other service visit ($11,215 vs. $8,812, p<0.0001) and pharmacy costs ($2,448 vs. $1,878, p<0.0001) than comparison patients. **CONCLUSIONS:** In the U.S. Medicaid program, menopausal patients had higher health care utilization and incurred higher costs than those without menopause, highlighting the economic burden of the disease.

PIH41

COST-UTILITY ANALYSIS COMPARING PROPRANOLOL WITH CORTICOSTEROIDS IN THE TREATMENT OF PROLIFERATING INFANTILE HEMANGIOMA IN ITALY

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OBJECTIVES: Infantile Hemangioma (IH) is one of the most common childhood benign tumours. Recent studies have demonstrated the success of propranolol for involution of IH and the higher clinically effective and safe compared with corticosteroids. The purpose of this study is to estimate the cost-utility of propranolol, a new medicinal product authorized for this specific paediatric indication (3.75 mg/mL, oral solution) versus corticosteroids (5.00 mg, tablets), used in clinical practice in absence of other authorised therapies of proliferating IH requiring systemic treatment. **METHODS:** A life-time (30 years) mixed decision tree and Markov model has been developed to describe the pathway of infants with IH and to assess costs and outcomes (Quality-Adjusted Life Years – QALYs – gained) from the perspective of the Italian National Health Service (INHS). Clinical inputs derive from the manufacturer's pivotal trial and literature review, validated by key clinicians in Italy. The economic evaluation considers direct medical costs associated with IH (drug acquisition, hospital admissions and outpatient visits) derived from public sources. The atopic dermatitis as a proxy for IH utilities, the Infants Dermatitis Quality of Life Index and the Children's Dermatology Life Quality Index were used to estimate quality of life. Probabilistic sensitivity analyses (PSA) were performed to investigate model parameter uncertainties. Costs and health benefits have been discounted at an annual rate of 3.00%. **RESULTS:** The cumulative costs are €2,399.32 and €1,859.68 while cumulative QALYs are 19.11 and 18.95 for propranolol and for corticosteroids respectively, corresponding to an ICUR of €3,372.75/QALY. PSA results suggest that 94.60% of the 1000 iterations fall within a €30,000 cost-effectiveness threshold considered acceptable for a marginal unit of effectiveness. **CONCLUSIONS:** The propranolol (3.75 mg/mL, oral solution for paediatric use) for the treatment of proliferating IH can be considered cost-effective compared to corstisteroids (5.00 mg, tablets) in the INHS perspective.

PIH42

COST EFFECTIVENESS ANALYSIS OF A VACCINE TO PREVENT HERPES ZOSTER AND POSTHERPETIC NEURALGIA IN ITALY

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OBJECTIVES: The aim of this study was to assess the cost-effectiveness of HZ vaccination compared to no vaccination strategy which only involves the treatment of patients affected by HZ, within the Italian context. **METHODS:** The natural history of HZ and PHN was mapped through a Markov model with lifetime horizon and cycles lasting one month. Both third party payer (the Italian National Health Service) and societal perspectives were adopted. Costs and Effectiveness data was derived from literature and discounted by 3.5%. Model results are expressed in terms of incremental cost-effectiveness ratio (ICER). Both deterministic and probabilistic sensitivity analyses were performed to appraise the effect of parameters' variation on model results. **RESULTS:** A population of patients with HZ aged between 60 and 79 years was hypothesized. The ICER of the vaccination equaled € 12,155 per QALY under the NHS perspective and € 11,118 per QALY under the societal perspective. Moreover, under NHS perspective the cost per HZ-episode avoided and the cost per PHN-episode avoided amounted to € 1,098 and € 8,742 respectively. Considering a cost-effectiveness threshold of €30,000/QALY, the probabilistic sensitivity analysis showed that vaccination is cost-effective regardless of the perspective adopted, in 99% of simulations. **CONCLUSIONS:** Results showed that a vaccination program against herpes zoster and post-herpetic neuralgia is cost-effective in Italian patients aged between 60 and 79 years.

PIH43

COST-UTILITY ANALYSIS OF A MEDICATION REVIEW WITH FOLLOW-UP FOR OLDER PEOPLE WITH POLYPHARMACY IN COMMUNITY PHARMACIES IN SPAIN: CONSIGUE PROGRAM

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OBJECTIVES: The objective of this study was to estimate the incremental cost-effectiveness ratio (ICER) of a medication review with follow-up (MRF) service for older people with polypharmacy in community pharmacies against the alternative of receiving usual dispensing. **METHODS:** The study was designed as a longitudinal cluster randomized trial carried out over six months of follow-up. The target